

# Aviation News

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**"Flying Mailcar":** Following closely on the report by Gael Sullivan, Second Assistant Postmaster General, on the future development of airmail service, is a projected conversion of the Fairchild C-82 Packet into a cargo mail carrier. The Fairchild company has prepared designs for the modification, together with performance data which show the craft could handle seven tons of mail on short hauls and six tons over a 500-mile distance. (Story on Page 7)

## NAA Lightplane Will Sell For \$6,100 At Factory

Four-place craft has estimated cruising speed of 150-mph., 160-mph. top.....Page 13

## New Texas Intrastate Airline Expanding Rapidly

In business little more than three months it has 19 planes serving 50 communities.....Page 27



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THE AVIATION NEWS

## Washington Observer



mission after the November election will be heavier in time action on measures of importance.

**OVER ALL TRANSPORTATION PROB.**—The over all transportation strengthening planned by the Interstate and Foreign Commerce Committee is not expected to get far this year. With the \$15,000 allocation, the committee started off the inquiry by having the interographer to index and organize some 500 reports which have been filed with the group.

**BOARD POTENTIALITIES**—The Mitchell Bill which now is before the Senate Interstate and Foreign Commerce Committee proposes a national board similar to the Monroe Board appointed by President Coolidge in 1925. Importance of the similarity is emphasized when it is recalled that the Monroe Board report was the genesis of the Air Corps Act of 1926, the Naval Aviation Act of 1926 and the Air Commerce Act of 1926, all of which were of tremendous importance to the aviation industry.

**AVIATION LEGISLATION DELAYED**—Any action by the House Interstate and Foreign Commerce committee on aviation issues the considerer of that year appears doubtful. Other work has priority. Members are preoccupied with campaigns for reelection. Chairman Lee plans to leave for California shortly for a seven-week stay. When he reentered Congress will be in his usual pre-judgment adjustment period session. The lame-duck Congress which will reconvene for a brief

**INTERNATIONAL HEARINGS**—Senate Commerce Committee expects to resume hearings this week on international aviation problems leading off with Almon E. Ruth, president of the National Federation of American Shipping, and representatives of the Railway Brotherhoods as witnesses. Both speakers have asked to testify on the Brussels agreement—in opposition.

**SURPLUS ENGINE DISAGREEMENT**—War Assets Administration and Pratt & Whitney again have failed to come to an agreement on the Army's lease bid for an agency agreement on surplus P&W engines. WAA generally will go to an agent at below market price to allow upon its recordation and sell at a profit. P&W offered to make all engines at 100 percent of market price, if WAA would make the same terms to any other applicant for an agency agreement for P&W engines. Neither WAA nor Justice Department would approve the offer.



Rear view of the K-94B, newest Army helicopter, shown in landing shape. (Story on Page 8)

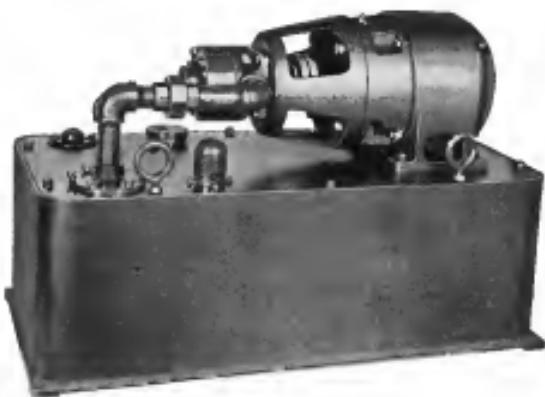


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# Aviation News

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## Fairchild C-82 Packet Modification Seen As Possible Cargo Mailplane

Could handle 7 tons on short hauls, 6 tons for 500 miles; proposal is significant in view of Sullivan's report on development of airmail service.

By SCOTT HERSHET

Fairchild Aircraft, whose C-82 Packet cargo plane found favor in Army eyes, has designs for a 130-mile flying mailcar which would be a modification of the AAF's "Flying Boxcar" capable of handling seven tons of mail over short hauls.

The announcement had particular significance in view of the recent statements by Second Assistant Postmaster General Ossie Sullivan that all long haul first-class mail could rate by air at a three-cent rate without loss and that an improved post system should be established (AVIATION NEWS, March 25).

**Foothills** — Inspect Plans on Fairchild's proposed flying mailcar, come after Post Office and Air Transport Association officials had inspected the Packet cargo plane, which is now in quantity production at the Fairchild factory in Hagerstown, Md.

The interior of the Packet's squared fuselage has been adapted to meet the needs of the Post Office Department with installation of such equipment as a sorting table, letter rack, chest, locked drawers for registered mail and bags. The equipment is built-in and more compact than that used in railroad

cars and designed for easy off-airport handling of mails.

**Packet**

Takes Shape

— The Packet can handle mail loads up to six tons on a 500-mile non-stop trip, or more than four tons on a 1,300-mile non-stop flight. The plane's cargo hold, 16 ft long, is shaped like a railroad boxcar and has approximately 80 percent as much cubic capacity.

In fact, the Packet is a

train

on wheels

— The tail uprights and wings open to the full width of the fuselage. Mail by the truckload can be loaded onto the car-like floor of the cargo hold through a rear door. A forward door opens on the storage space extending from the nose to midships. In the midship wall, a door or hatch is provided to open directly into the sorting section. When the tail is closed it becomes an additional storage space.

**Burgess**

Airplane

— Robert B. Burgess, superintendent of Air Mail Service, commented that the Packet looked like an ideal plane for the airmail job. He said it was "large enough, fast enough and quiet." It looks like a "flying boxcar" but far and, two or even three clerks to sort the mail en route."

One of the greatest difficulties of the Post Office Department is to move airmail as quickly as possible during peak airmail periods and Burgess said that much time is lost because the peak load of airmail is distributed among several planes leaving hours apart.

**Credit** — Set New Schedule? — "If the airmail is operated a few all-mail planes," he said, "airmail could be handled more rapidly with these peak periods of traffic."

Congress seems to be favorably disposed to a reduction in airmail rates, and Sullivan has recommended legislation preventing a 5-cent increase domestic air postage rate with a subsequent reduction, in addition to augmenting that permit the average of all long-haul first-class mail by air should be charged at three cents.

**Stabilization** — Sullivan feels that airmail rates must be stabilized and further reduced and that until the Department knows definitely the rates on which it can depend, it will be compelled to disregard its recommendations in uncertainty."

Also, until a lower rate is established approximating the 15 cents per lbs-mile proposed in the show cause order of the CAB of Dec. 22, 1944—or even lower rates based on the costs of performing the service required by any particular kind of air traffic—the volume of mail that can be provided by the Post Office Department in furtherance of its expansion will be restricted by the limitations of its revenues.

**Flight to Major City** — While there are many improvements which will have to be performed to free air transportation from weather



"Flying Boxcar" As "Flying Post Office": The Fairchild C-82 Packet, nicknamed the "Flying Boxcar" by Army pilots, may become a future mailplane if de-



signs worked out by Fairchild engineers are favorably received. Sketch shows interior arrangement, similar to a railroad mail car but much lighter

AVIATION NEWS • April 1, 1946

HEADLINE NEWS ...?

er shudder and make it available for the major responsibility of operating all long-haul mail and cargo schedules. The Farfield mailplane service is a single step forward toward that objective.

The need for increased airmail service is growing rapidly and present transport facilities, with accommodations divided between passengers and mail will soon be inadequate.

**Airpassenger**. Given—the fact of the Farfield plane, linked with its capacity, range and cost of landing, have attracted the attention of airline and Post Office officials as well as meeting this problem.

Operating weight of the normal Farfield cargo would be 36,000 lb of which 7,735 lb would be for payload, co-pilot and clerk and outer baggage and 28,265 lb for mail accommodations such as letter cases and tables, stanchions, partitions, head-dash stripes, fixtures and meal-service, for a total of 30,119 lbs. Fuel and oil will add 4,030 lbs, for a 38,000-mile trip at 10,000 ft operating altitude, an additional 906 lbs for the mail sorting service and 11,241 lbs for the mail storage section.

For a 3,000-mile trip with an operating weight excess of 20,119 lbs the fuel and oil would add 7,376 lbs, the mail sorting section 1,693 lbs and the mail storage section 8,811 lbs for a total of 30,686 lbs.

## PBY-5A Converted By Canadian Company

What is believed to be the first PBY-5A Cessna amphibian to be converted from wartime use for passenger freighting has left Canadian Car & Foundry Co. aircraft plant at Montreal for Colombo. The amphibian will be sold by Canadian War Assets Corp. to Chas. H. Bass Co., New York, the Bassett Oil Co., for use in transporting freight and passengers between Bogota and Cali, Colombia.

Conversion changes included taking out the front barrels and replacing with a rounded nose. Freight doors were placed on the sides of the fuselage where wartime machine gun blisters were located. Bubbletop operations in interior of plane were enlarged to facilitate loading of freight. The passenger's and wireless operator's compartment was cleared for freight payload.

**Passenger Accommodations**—Re-



**"Flying Mailbox" Detail.** Artisan's sketch of the mail sorting section which would be installed in the Farfield Farject to equip it as an airmail freighter.

head the main freight compartment to a passenger cabin with four seats, a lavatory with sink and waste disposal, a galley with two burner stove and a down folding seat for passengers when no freight is carried in main compartment.

Wing panel has been stripped off, wing fabric replaced. Avionics is equipped with two Pratt & Whitney two-row Wasp engines of 1,350 hp each. Plans retain its wartime specifications, can take a 5,000-lb payload.

The Cessna or Catalina amphibian is intended for use in Canada and a large portion is to be offered for sale by WAC. Sales are understood to have been sold in from U.S. war surplus.

## AAF Training Command Transfer Is Completed

Transfer of Army Air Forces Training Command headquarters from its wartime location in the Texas and Pacific Building, Ft. Worth, Tex., to Barksdale Field, La., has been completed in line with the postwar AAF policy of consolidating at permanent installations for maximum economy in the post-war training programs.

The command headquarters at Barksdale has been established in a completely re-decorated three-story building with about all offices of the headquarters being quartered in the one structure.

**Headed By** **By** **Command**—U. S. Gen. John K. Cannon, wartime Com-

mander General of the 12th Air Force and more recently Commander of U. S. Air Forces in Europe, has recently been named Commandant General of the Twelfth Command (Aviation News, March 18). AAF training is directed through the Flying Training Command Headquarters, Texarkana, and the Twelfth Command, Command, Barksdale Field, La. Nine base 20 subordinate stations are operated by the two units.

## Simplified Operation Claimed for XR-9B

New G & A helicopter, with low power-to-speed ratio, may be considered considerate.

Reduction of the power-to-speed ratio for helicopters accomplished in the AAF's new XR-9B (Photo on page 12), manufactured by G & A Aircraft, Inc., Willow Grove, Pa., Firestone subsidiary, coupled with the simplicity of operation claimed for the new aircraft makes it an interesting new contender among potential postwar helicopters.

The XR-9B (Army No. 4000, March 11) is powered with a little Lorraine engine, yet it has flown faster than 100 mph and comes in at approximately 60 mph with fuel no more than three hours of flight. It has a service ceiling of over 10,000 ft, and a rate of climb better than 1,000 ft/min.

**Field Ready** **In** **Fly**—Col. K. S. Moore, chief of Wright Field's rotary wing section, is quoted as stating: "I believe anyone can be taught to fly this helicopter in 10 hours or less."

Acting on this belief he plans many experimental instructional flights for men who have not previously flown airplanes, to see how rapidly they may learn to fly the XR-9B.

**Flight Control** **Described**—In flight, directional heading is obtained by use of conventional rudder pedals which activate the torque corrector supplied by the tail rotor. A conventional control stick governs horizontal travel of the aircraft in any direction, by controlling the cyclic pitch of the main rotor.

An electric-hydraulic governor will measure constant power/mach number rate of speed regardless of throttle condition or power used. This makes it possible to ascend or descend vertically, safely by pilot's use of the throttle with the assistance of the torque corrector.

**Approved** **By** **Commission**—U. S. Gen. John K. Cannon, wartime Com-

mmandant of the governor.

**Rotor Details.** The three-blade main rotor is 22 ft. in diameter, while the smaller tail rotor is 6 ft. 6 in. in diameter. The helicopter is 23 ft. 7 in. long, is 6 ft. 6 in. high, and 9 ft. wide at the landing wheels.

Rotor blades are tapered from 15.25 in. at chord at the root, to 5.5 in. at the tip. They are constructed of wood and plywood, over steel tube spars, and finally fabric covered and doped.

The welded steel tube fuselage is covered with aluminum skin sheet, except for the transparent bullet nose section. The fuselage has a tailon nose with sheet skin.

**Modified Design**—Designed for cargo, community and passenger transport, the XR-9B is designed mainly for utility uses as a postwar aircraft. However, G & A engineers have enlarged the cabin and made other changes from the original XR-8B which they believe now put the aircraft in the class of a general purpose helicopter for commercial air taxi, patrol and rescue work and they regard it as the forerunner of an ultimate family size of the air.

## Curry Expected to Stay As Colorado Air Head

Gen. John F. Curry (retired) is expected to stay as Colorado's Director of Aviation. A flurry of opposition which greeted his appointment by Gov. John C. Wynn has died down.

It was caused largely by the fact that Gen. Curry, the government's choice for the job, was not on a list of three prospective candidates submitted to the newly-created State Aviation Commission, as presented by law.

Under Colorado law appointees may be named only permanently until the Civil Service Commission can examine candidates and certify a permanent appointee. However, the permanent appointee may hold office for years until the Commission acts.

**Approved By Commission**—Gen. Curry was approved by a majority of the commission as temporary director. Gov. Wynn said that while Gov. Curry's name was not on the first slate of three submitted to him by the Aviation Commission, it was an supplementary list. The permanent appointee had the position pays \$5,600 yearly.

## FLC Soon May Be Transferred From State Department To WAA

Move seen likely as result of highly critical report by Senate's Med Committee on Department's surplus-handling record, and failure of FLC sales center at Miami.

By WILLIAM KROGER

A Senatorial spotlight on the disposal of surplus property abroad, combined with an apparent decision on the part of the Foreign Liquidation Commission in establishing an elaborate export arm center at Miami, points to the possibility that FLC may shortly be shifted from the State Department to the War Assets Administration which became an independent agency last week, succeeds War Assets Corp.

The Senate Committee on Appropriations, National Defense Program (Joint Committee) was highly critical of the State Department's policies and actions on overseas surplus disposed on a report prepared by Sens. James M. Turner (D., Del.) and William F. Knowles (D., Calif.) on the basis of a closed-world trip.

**"Poor Bargain"**—Scared—Labeled particularly as the "poor bargain" with Great Britain, the flat talk sale of overseas surplus to the aircraft industry, FLC has made a poor showing.

Actually, a lot has had little to tell, the War Assets Corp., with financial buyers for the most-needed aircraft, did not make many planes available to FLC.

**FLC Remained**—This was recognized in a recent report in March, with FLC acquiring a number of PT-16s for the Miami meet. When sales of these can be used as an offset to the previous figures, FLC will release stimulus on its paid Miami sales.

However, FLC and WAA have decided as joint operation of the Miami center (Aviation News, March 25), and it would not be too surprising were FLC to withdraw.

Because of FLC's problems ahead with dollars, the haggling of other governments, and military demobilization that has left no troops to guard the surplus, the material is being brought back to this country and turned over to WAA for disposal as fast as skipper space is available.

**But** **No** **Easy** **Business**—Shortly before WAC passed out of existence, it established an Export Division to



WEDDING PRESENT:

Paul Manz, Los Angeles charter operator who recently purchased all the 282 surplus planes in the Shreveport, Okla., depot, poses with the memento on the propeller of a B-17 which he gave as a wedding gift to Forrest Dickens, attorney, and Irving Maier, Columbia Pictures assistant director. Moore was a B-17 pilot for four years during the war.

well as planes located in the country by both foreign governments and foreign business enterprises. This division is being continued by WAA.

This points a dimension of foresight for PLG. Although the Senate committee approved the principle of leaving the State Department handle disposal of overseas surplus planes because that body handled foreign relations, State itself has as great desire to continue in the interim process. Aware that it is unwise to put off reliance on its buying of surplus aircraft, it has been hasty to play a part in surplus disposal—and hence no even greater target for attack.

## \$639,640 Slashed From CAA Allocation

String \$818,000 off the Budget Bureau's estimate, the House Appropriations Committee last week recommended a \$2,048,000 deficiency allocation for Civil Aviation Administration operations between now and July.

Funds approved by the House are as follows:

General administration, \$86,000—or \$10,000 less than proposed by the Budget Bureau.

Establishment of air navigation facilities, \$431,000.

Maintenance and operation of air navigation facilities, \$748,800—or \$184,345 less than recommended by the Budget Bureau.

Safety regulation enforcement, \$884,000—or \$188,000 less than proposed by Budget.

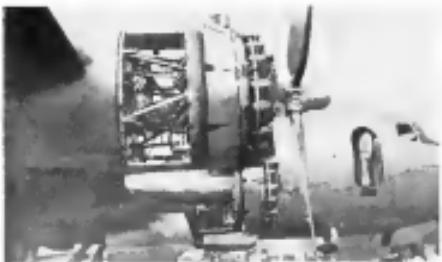
Maintenance and operation of aircraft, \$935,759—or \$88,395 less than the Budget estimate.

Construction at Washington National Airport, \$15,340,000 for maintenance of the port, \$10,000.

Budget requests for the establishment of air navigation facilities and for construction and maintenance at the Washington airport were approved by the House committee in full.

**\$130 Employees Advanced**—The \$10,000 approved for CAA administrative expenses will be used to meet salary separations resulting from the upgrading of 139 CAA employees. The \$10,000 cutback knock out four thousand underlings contemplated by the CAA.

Establishment of a "plant staff" will act as liaison for the CAA with PWD in Montreal and with Air Conditioning Contractors. CAA asked \$18,000 to establish liaison with the international aviation con-



WRIGHT-ROER "POWER EGG"

Quick and easy access and complete interchangeability at any of four major stations are features of Wright Aeronautical Corp.'s new Wright-Roer Power Unit (AVIATION NEWS, March 29). Designed primarily for the DC-4, it houses the new Wright R-1820 Cyclone engine. Construction of the new power unit, first to be produced by an American engine manufacturer, was completed recently at Santa Monica, Calif., by the Civil Aeronautics Administration. The unit can be installed in a plane in 28 minutes.

and the inter-departmental government aviation group.

Establishment of a "management consultant" to work out a classification of government aircraft requirements with the Army and Navy.

Establishment of range force field offices, at an anticipated cost of \$31,000. The offices to offer services to international air operations would be located at Lissabon, Portugal; Belgrade, Serbia; C. Z. Stockholm, Madrid, San Juan, P.R.; Miami, New York, and New Orleans.

Establishment of an aviation production statistics service. CAA asked \$12,000 so that it could carry on the function, performed during the war by the AIRTEC Bureau, Central Office of the WPA.

The Naval Academy's aviation department, now being organized by Capt. Robert S. Price, is expected to be in operation when the next semester begins on July 8.

An amateur aviation program has been prepared by Vice Admiral Andrew W. Field, academy superintendent, including an airport which will cost perhaps \$17,000,000 in the initial phase and designed to accommodate every type of aircraft flying to the Navy.

**Improvements Planned**—The \$10,000 granted for establishment of new navigation facilities will enable CAA to make improvements along the Denver-Los Angeles route, enlarge its facilities in Alaska, and establish heliport installations in Western Bureau stations to improve air weather reporting services.

## Canadian Surplus Sales

Canadian War Assets Corp., government war surplus disposal agency, and strength valued at \$265,501 in February, is adding to its

the \$10,000 aircraft components for \$16,321, aircraft instruments for \$2,558, aircraft raw materials for \$3,369 and aircraft engine accessories for \$10,338. Aircraft radio equipment with direct domestic applications has been added to the WAC to the Canadian government for its veterans rehabilitation training courses.

## Annapolis Air Department To Be Opened in July

The Naval Academy's aviation department, now being organized by Capt. Robert S. Price, is expected to be in operation when the next semester begins on July 8.

An amateur aviation program has been prepared by Vice Admiral Andrew W. Field, academy superintendent, including an airport which will cost perhaps \$17,000,000 in the initial phase and designed to accommodate every type of aircraft flying to the Navy.

**Will Give Flight Training**—One of the aviation departments which will be integrated with the regular academy is to give every midshipman basic elementary flying. Fundamentally the aviation department will be concerned with aeronautical education rather than flight training, although after this year every midshipman before graduation will be given sufficient instruction to enable him to solo.

## New VA Set of Standards Due To Clarify Veterans Training

Revisions being prepared in cooperation with CAA and industry are expected in about two weeks; CAA, meanwhile, warns prospective A & E mechanics that schools must be approved.

Aviation training for veterans, confined by the requirement that only schools approved by states can participate, is expected to be clarified partially within two weeks by a new set of standards being drawn up by the Veterans Administration in cooperation with CAA and industry representatives.

Meanwhile, CAA has moved to play a larger part in the program through a warning to veterans that only those taking training as CAA-approved schools can qualify for the airplane and engine mechanics' examinations. This is, in effect, if it is pointed out, gives CAA—and not VA or the state—a veto power over schools in which a veteran may take a mechanician's exam.

**CAA Outlines Policy**—CAA in an "information package" to veterans, stated it will not recognize correspondence courses, nor mechanician schools which are not CAA-approved schools. A veteran taking either type of course will be required to have a full year of "broad practical experience" in work in the field.

It is anticipated a veteran will enter a mechanician's course without the objective of obtaining an A & E license, as a license is necessary to hold the best jobs in the field.

**Compulsory Under Act**—The Congressman's Readjustment Act specifies that, costs being reasonable, VA must assist for training with any educational institution approved by a state. That, as has been reported previously in AVIATION NEWS, has given rise to fear that potential recruits may dismiss the offering of many "schools" not adequate to give proper and sufficient training.

VA up to now has insisted all suggestion that it lay down rules for training with which schools would have to comply in order to weed out the "fly-by-night" and incompetent schools.

**Takes Out of VA's Hands**—The CAA ruling, however, takes the determination out of the hands of VA and the states; no veteran would enter a school for mechanics training when that school would not fit into VA's new CAA requirements. It is believed that the forthcoming

standards of VA, while not encroaching on the states' approval authority, will, by stipulating how much will be paid for a course containing certain elements, dampen some of the fever that has been created over the issue.

### Trade Groups

Active—another movement which perhaps will dominate this year, as well as avoid some confusion inherent in the CAA ruling, is underway in veterans' states. The New England Aviation Trades Association has worked out an arrangement with the Massachusetts Department of Education whereby the department will approve CAA primary and advanced schools in which a veteran may take a mechanician's exam.

**Will Supply Propellor Parts**—Additional contracts just obtained by Ryan is that with General Electric for parts for that company's new prop-jet power plant which uses a propeller by means of a gas turbine and at the same time provides jet power to drive the thrust from the engine exhaust.

Industries of jet propulsion engine assemblies represent a new field which the company expects to represent as important share of future business for the standardized division.

### Other Contracts

In addition to their installation on B-17s and Douglas transport planes, Ryan will also supply the B-52 bomber under new contracts for the B-52

Airplanes used for instrument training cost \$10 per hour. Rate on the twin-engine Convair is \$40 per hour. On the single-engine Convair, there are variations, one operator having agreed for a \$25 rate on RT-33V for instrument training, and \$12 for work in a Piper Cub whereas the standard rate for similar training in a PT-19 is \$10.

## Ryan Manifold Orders Total \$2,500,000

Ryan Aeronautical Corp.'s standardized manufacturing division has signed contracts totaling more than \$3,000,000 in new aircraft manifold business in the last 60 days.

Glendale, Calif., president, said a large portion of this business is for installation of Ryan manifolds on new long-range passenger and cargo transport planes. Under the contracts just signed, Ryan manifolds will be standard equipment on Boeing C-97 Transporters and on the Douglas DC-4s.

**Will Supply Propellor Parts**—Additional contract just obtained by Ryan is that with General Electric for parts for that company's new prop-jet power plant which uses a propeller by means of a gas turbine and at the same time provides jet power to drive the thrust from the engine exhaust.

Industries of jet propulsion engine assemblies represent a new field which the company expects to represent as important share of future business for the standardized division.

**PREFABRICATED HANGAR**—This large prefabricated hangar, furnished by Grinnell-Neumann Corp., Houston, Texas, for Spanish School of Aviation, Miami, Okla., is 210 ft. long, 148 ft. wide with a 16-ft. clearance, and cost \$39,000 delivered but was erected. Concrete roof generally runs about 20 percent. Passage of the federal airport and airfield is expected to bring a big boom in this type of structure, since the bill prohibits federal share in hangar costs and thus it is claimed to be less expensive than the conventional one.



## PREFABRICATED HANGAR

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**Many Military Orders** — In the military field, the company also has new orders from Lockheed for exhaust collectors for the P-51B multi-engine fighter and seven bombers from Marmon for the four-engine B-33 Flying wing bomber; from Douglas for the C-54 Skymaster and C-54 Globemaster; and from Martin for the Master, the Navy's newest carrier-borne dive and torpedo bomber.

Ryan also is handling replacement orders on all of Douglas' earlier transports.

## EAL Names France As Maintenance Chief

Seattle joins United Air Services; Cal Royal joins in TWA executive staff.

Transfer of a veteran aviation finance firm to the industry as the transport field was among outstanding personnel changes announced last week.

**C. H. France** (photd), formerly vice-president of Commercial Corp., has been appointed vice-president in charge of maintenance and management for Eastern Air Lines. With headquarters at the major airline's new maintenance base in Miami, France will be in charge of C-H in Miami until France goes to New York next week.

Eastern is operating management. He will be in charge of all maintenance, overhaul and maintenance activities resulting from addition of four engined planes and operation of the newly acquired Miami-Corvair plane.

**Standard 2** Eddie Stoltz, who has been in charge of engine, aircraft maintenance and airframe operations for the Aircraft division, War Air Services, Atlanta, has been named to become manager of United Air Services, Inc., Birmingham. He will be engaged in the management of United's newest operation activities at the West Coast area.

Stoltz was with Birmingham's Farnes-Camp Corp. and prior to that was chief of the aircraft division, CAA War Training Service.

**Cal Royal** R. E. Reed has joined the management of TWA's Atlanta maintenance plant. Reed will be stationed in Kansas City where he will be faced with the Federal Bureau of Investigation and formerly was chief of police.

## Airborne Television Uses Demonstrated

While having little immediate use in commercial aviation, airborne television points the way toward many revolutionary war combat activation, it was made apparent in the first public demonstration of war-developed equipment by the Navy and Radio Corp. of America recently at the Naval Air Station, Washington, D. C.

The Navy sent itself two Bischmidt bomber trainers to draw back "cockpit views" as picked up by television cameras in the planes' noses, to screen placed before observers in the gymnasium of the naval air station.

**Naval Broadcast Operation** — While the two aircraft cruised in the vicinity of Washington, a Navy modification of a Martin B-52 Marauder bomber took off from Point Mugu, Calif., circled that city, proceeded to Anacostia and then to a rendezvous with Navy fighters from the Fleetwing Blue base. It then flew east to Washington.

The entire trip was seen by the spectators at Washington just as the segments of the plane saw it.

**The Set Developed** — The plane circling Washington contained one form of airborne television equipment and aerial cameras with an electronic selector for both cameras and the cameras function as the control of the plane. Navy designation for this equipment is "Black." This name is coined by among the plane.

The second form of equipment designated "Ring" was in the B-52—a seat camera and a waist camera that can be aimed in any direction. "Black" is a short-range equipment, transmitting on a beam 15 to 24 miles. "Ring" transmits ranges up to 100 miles from an altitude of 15,000 ft.

**End In Revision** — "Black" equipment was used during the war as attacks on Bismarck Bay and Balikpap, and in guided missiles. Chief conduct user of airborne television is expected to be in guided missiles and for intratheater aerial reconnaissance, whereby a concealed pass can see what the pilot sees at the same time he is seeing it.

This will in large measure replace aerial photography reconnaissance.

Range of the cameras is scarcely more than that of the human eye. This fact, combined with the further limitation that the camera

cannot penetrate fog, darkness or low visibility to any great extent, does not make it applicable to aerial reconnaissance problems except in the case of guidance systems used in experiments. Airborne television will be used as drone planes surveying the results of the atomic bomb test that number at Bikini Atoll.

## Crawford Named President Of National Air Races

**Fredrick C. Crawford**, president of Thompson Products has been elected president of the Cleveland National Air Races to be held at Cleveland Airport, Aug. 25-Aug. 3.

A five-year lease has been signed with the city of Cleveland for use of the airport and a five-year franchise on the races obtained from the National Aeromotive Association. Benjamin T. Franklin, executive vice-president of the National Aeromobile Show held recently in Cleveland, has been named as general manager of the races, and is to be held next year.

## AVIATION CALENDAR

**Sept. 13—1950 National Aeromobile Show** — The 10th annual National Aeromobile Show will be held at the Cleveland Public Works Fair Grounds, 130th Street and Mayfield Road, Cleveland, Ohio.

**Sept. 14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Oct. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Nov. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Dec. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Jan. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Feb. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Mar. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Apr. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—May 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—June 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—July 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Aug. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Sept. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Oct. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Nov. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Dec. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Jan. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Feb. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Mar. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Apr. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—May 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—June 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—July 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Aug. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Sept. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Oct. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Nov. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Dec. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Jan. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Feb. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Mar. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Apr. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—May 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—June 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—July 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Aug. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Sept. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Oct. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Nov. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Dec. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Jan. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Feb. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Mar. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Apr. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—May 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—June 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—July 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Aug. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Sept. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Oct. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Nov. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Dec. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Jan. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Feb. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Mar. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Apr. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—May 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—June 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—July 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Aug. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Sept. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Oct. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Nov. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Dec. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Jan. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Feb. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Mar. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Apr. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—May 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—June 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—July 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Aug. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Sept. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Oct. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Nov. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Dec. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Jan. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Feb. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Mar. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Apr. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—May 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—June 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—July 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Aug. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Sept. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Oct. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Nov. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Dec. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Jan. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Feb. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Mar. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Apr. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—May 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—June 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—July 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Aug. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Sept. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Oct. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Nov. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Dec. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Jan. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Feb. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Mar. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Apr. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—May 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—June 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—July 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Aug. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Sept. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Oct. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Nov. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Dec. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Jan. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Feb. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Mar. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Apr. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—May 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—June 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—July 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Aug. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22—23—24—25—26—27—28—29—30—31—Sept. 1—2—3—4—5—6—7—8—9—10—11—12—13—14—15—16—17—18—19—20—21—22**





## Briefing For Private Flying

### NEW IDAHO DIRECTOR:

Chet Melton, below (right) has been appointed state director of aeronautics for Idaho, succeeding A. J. Bennett (left) who resigned to become a Piper Club and Globe Swift dealer in Boise. Howard M. Bush, center, assistant director under Bennett, also has resigned. Melton's former post as chief Statehouse newspaperman was first introduced in *The Aviation News* of Feb. 19, 1942, during the war and was CPT aviation correspondent for Idaho in 1942. He also is secretary of the Idaho Aviation Association.

### Veterans Group Backs Pennsylvania Airpark

Opposes no support development of Hobart-Pool project in face of pressure from property owners.

Community action in support of a proposed airpark near McElvain and Pool, Pa., is developing as the result of mobilization of 40 returned veterans who have formed the Veterans' Airports Association.

The organization, which already has held two meetings, is seeking to avoid the antagonism of a small group of property owners in the vicinity of the proposed field who have filed an equity suit to prevent establishment of the airpark, charging that it is a menace. A hearing is scheduled to Jan. 29.

**Flock Flying Base:**—The veterans, most of whom were service flyers, seek to have the field established so that they may continue to fly, or may take further flight training.

M. S. Crider, Philadelphia businessman, who has leased the property, had planned to establish the field under management of a former Army flyer and a former Navy flyer. He has leased 125 acres for two years, at a rate of \$100 a month for the first year, and \$150 a month for the second, with an option to purchase the land at \$180 thousand by name of low-fly-

The trend toward installation of radio speakers in the cabins of personal planes is holding rapidly. The new Bellanca four-place Cruisair 8, with 150-hp engine, has a speaker installed in its cabin dome and a radio antenna located in the luggage compartment inside the plane, although the company does not provide a complete radio installation at the plane's list price of \$3,250. The Steen Saenger 100, whose excellent sound-giving radio installation was described earlier in these columns and the Conn two-place Model 140, which is partially soundproofed, are other examples of the light cabin speakers. While it is not likely that changes will be made as models already sold, it is probable that the radio speaker will be chosen a standard arrangement in any personal airplane above the stripped-down utility plane class in the 1947 models.

**GOODWEAR AMPHIBIAN**—A second Goodyear amphibian, the GA-2, which will carry three persons, is powered by a 165-hp Franklin engine, and is credited with a cruising speed of around 130 mph. now is flying. The GA-1 which had Section NX3228, and was powered with a Franklin 150-hp engine, was flown last year. (*Aviation News*, March 12 and April 9, 1943.) At that time it was reported to be a preliminary experimental model which would probably be re-engined for production. The GA-2 has Section NX3221, previously the uncompleted Goodyear prototype. The Goodyear plant, Akron, Ohio, which made "Cessna" fighters and many aircraft components during the war, remains close-lipped about its new personal plane project until it is definitely committed to production. Goodyear lists horsepower, cruising speed of the Goodyear plane, if reported correctly by an unofficial source, is somewhat higher than that of the Cessna-powered Trainer amphibian, the Republic "Seabird," the two personal plane amphibians in the lower price class were in production. The three-place Trainer has been quoted at 115 mph, cruising speed with two 85-hp engines, while the four-place "Seabird," with a 112-hp engine, is quoted at around 100 mph, cruising speed.

**STRATOPLANE ON SHELF:**—The Ahrens pop-up Stratoplane, designed and built about a year ago as a scientific project, has been delayed temporarily to meet financial difficulties. Dr. George Ahrens, president of Ahrens Aircraft Corp., Lansing, Mich., has disclosed. Meanwhile, the company continues with its aerial survey and mapping work and manufacture of instruments and equipment for the work. The projected Stratoplane was designed as a folded-up passenger cabin version of the two-tailboom pre-war Republic photographic plane and was to have been available either as a high altitude photographic plane or as a five-passenger personal aircraft.

—Alexander Mackandy

an acre at the end of the two years.

While the acre is not now owned, the protesting property owners, many of them owners of large estates in the area with a combined value of more than \$1,000,000, are seeking to have it added to another acre or two of preventing the field's establishment.

**Work Being Resumed:**—However, Crider is preparing two temporary 180-ft runways and expects to put the field in operation very soon, to furnish the non-air base, which under Pennsylvania law, cannot be otherwise.

Protests of the property owners are similar to those made in many other such cases, including one from a livestock breeder who complains about the distress caused to his cattle.

Public opinion, except for the small group of property owners, is reported generally in favor of the airpark.

Public opinion, except for the small group of property owners, is reported generally in favor of the airpark.

# No Barriers in the Sky

## -YET NEW FLOAT PLANES ARE GROUNDED

**HERE'S WHY:** when the war ended, we turned eagerly to our present job of producing aluminum-alloy floats for personal planes. We placed substantial orders for materials, cleared sufficient space in our plants and were ready for increased production.

**BUT MATERIALS ARE JUST TRICKLING IN.** Our employees have been loyal. They have stayed on the job. Yet 20 years of experience in building float marine nothing when aluminum forgings, castings and extrusions are scarce. One hold-up after another, in industries from fuel oil to mining has held down production.

**THIS MEANS** you may be delayed in getting delivery of your Edo floats, even though we have more than enough capacity to meet current demands.

**BUT WE DO PROMISE YOU THIS:** we are building floats to the limit of our material deliveries right now. And as fast as additional materials come in, we will add extra man-power to try to make up for lost time.

**WAITING IS DIFFICULT, OF COURSE.** But we assure you that when your Edo floats are delivered, they will be the finest floats the combined skills of Edo have ever produced.



**HOW WE KEEP AN EYE  
ON WHAT HAPPENS INSIDE YOUR ENGINE**



The hot engine into which this Standard engine is passing may have a glass eye, but it certainly doesn't have a glass jaw—it takes a broad bearing.

Beside its combustion chamber we cause the severest distortion we can devise. Then, through a thick quartz plate in the cylinder head, we examine the combustion pattern to see what makes a gasoline detonate. With the help of the stroboscopic shaker above us our "stop" fuel combustion at any point for detailed study.

Many of the things we learned from the engine with the glass eye make Chevron Aviation Gasoline safe for engines, more dependable for private pilots, safer necessary for commercial flyers. Engineered for strenuous life by years of painstaking laboratory work like this, no wonder Chevron Aviation Gasoline is chosen to power test flights at Boeing, North American, Lockheed and Lockheed.

Take a tip from the non-purists, my Chevron Aviation Gasoline in your plane, too.

**Two great products  
of petroleum research**



**take better care  
of your plane**

**CHEVRON NATIONAL CREDIT CARDS AVAILABLE** for private flyers, good at airports throughout the United States and Canada. If you need one, write the Western States of California, 221 Bush Street, Room 1440, San Francisco, California, or call the Standard dealer in your field for an application blank.

**STANDARD OF CALIFORNIA.**

## PRODUCTION

### 34 Aircraft, Equipment Companies Had 1.2% Average Profit in '44

Figure is exactly the same percentage as that shown in '43 for 32 manufacturers reporting, but total net rose from \$69,275,000 to \$112,344,000 on sales of \$9,152,252,000.

The average net profit after income taxes of 34 manufacturers of aircraft and aircraft equipment during the year 1944 amounted to 1.2 percent of sales, according to the survey of profits and operations of this industry group, among others, made public last week by the Securities and Exchange Commission.

This was exactly the same percentage shown in 1943 for the 32 companies which reported similar data to the commission for that year.

**Cash Gains Increases**—In terms of dollars, the 34 companies reporting in 1944 showed a net profit after taxes of \$112,344,000; their total estimated sales of \$9,152,252,000, compared with \$9,079,000, or a total estimated sales of \$6,026,876,000 for the 32 companies reporting in 1943.

As a percent of net worth, however, the 34 companies covered in the 1944 survey showed a net profit after taxes of 1.2 percent, compared with 1.0 percent for the 32 companies which reported in the preceding year.

**Curtiss-Wright Corp.**, whose report included data for its subsidiary Wright Aeronautical Corp., showed a net profit after taxes of \$1,116,000 apiece in 1944, compared with \$1,209,300,000 in the preceding year. Net income after income taxes in 1944 amounted to \$14,331,000, or 0.8 percent of sales. Net income as a percent of net worth after income taxes was 23.7 percent, compared with 20.1 percent in 1943.

**Fiberglas Alverst Co., Inc.**, reported total sales of \$2,063,481,000 in 1944, against \$2,072,831,000 in the preceding year. Net income after income taxes in 1944 amounted to \$7,465,000, or 0.7 percent of sales, compared with \$9,035,000, or 0.6 percent of sales in 1943. Net profit after income taxes in 1944, as a percent of net worth amounted to

28.6 percent, the percentage of sales also being 2.1 percent. As a percent of net worth, net income after taxes was 22.2 percent in 1944, compared with 24 percent in the previous year.

**North American Aviation, Inc.** listed total sales of \$844,043,000 in 1944, compared with \$69,684,000 in the preceding year. Net profit after income taxes in 1944 amounted to \$6,380,000, or 1.2 percent of sales, while net income after taxes in 1944 amounted to \$6,780,000, or 1.6 percent of sales. As a percent of net worth, net income in 1944 was 27.8 percent, as against 35.2 percent in the preceding year.

**Lockheed Aircraft Corp.** reported total sales of \$862,432,000 in 1944, compared with \$804,889,000 in 1943. Net profit after income taxes in 1944 amounted to \$5,823,000, or 0.8 percent of sales, compared with \$1,904,000, or 1.2 percent in the preceding year. Net profit after income taxes as a percent of net worth amounted to 20.1 percent in 1944 and 28.8 percent in 1943.

**Republic Airlines Co.** listed total sales of \$885,061,000 for 1944, compared with \$692,130,000 in the previous year. Net profit after income taxes amounted to \$5,326,000, or 0.6 percent of sales, in 1944, compared with \$4,633,000, or a similar percentage of sales in the preceding year. Net profit after income



#### NEW SUPERSONIC ENGINE

Helping a model of a new jet engine which is designed to reach speeds up to 2,600 mph is R. T. De Veil, University of Southern California engineer, and R. E. Margrath, president of Margrath Aircraft Co., Venice, Calif., and USC director of aeronautical research, whose company developed the engine. A Navy project, the model will be tested in the area Mach 2.5 wind tunnel under construction at the Kaiser steel mill at Fontana, Calif. (Aviation News, March 21).

tions as a percent of net worth in 1944 was 22.2 percent, as against 21 percent in 1943.

• **Globe L. Martin Co.** showed total sales of \$10,818,000 in 1944, compared with \$72,000 in 1943, the preceding year. Net profit after income taxes amounted to \$8,318,000, or 0.8 percent in 1944, compared with \$1,982,000, or 0.8 percent in 1943. Net profit after taxes as a percent of net worth was 17.2 percent in 1944 and 16.4 percent the preceding year.

## Lear Plans to Build More Home Radios

A substantial shift of production from parts for aircraft radios and electronic components designed to home radios is indicated by Lear Inc., in President William P. Lear's annual report for 1945 to stockholders:

Company expects to sell about \$6,093,000 or \$6,908,000 worth of home radios this year. At the end of 1945 it had the largest share of its inventories, \$618,000, and so far as our type, Aircraft radio inventory was \$530,000. Government radio contracts, \$846,000, new stock and electric - mechanical applications \$932,000.

• **Financial Report** — Lear's 1945 total sales of \$10,818,000 was a net increase of \$2,871,000 at finance and excess profits taxes were \$12,331,000, leaving a net profit of \$6,871,000, equal to 38 cents per share on the outstanding common.

## Franklin Now Producing Model 335 in Quantity

The new Franklin "21B" engine now in quantity production for Biston and Bellanca. It will power the low-wing Bellanca Cruisair and the high wing Stromberg Younger 250.

The six-cylinder opposed engine runs 2000 R.P.M. at maximum rpm, produces 140 h.p. at 2800 r.p.m. Service and features have been incorporated in the engine, including a newly-designed con-pac aluminum cylinder with increased cooling surface—more than 7,500 sq. in. A special fuel-type carburetor has also been designed for the engine with several features new to the general plane field. These include a built-in altitude control adjustable by the pilot from the instrument panel; an accelerative pump for quicker starting, and a carburetor idle cut-off to insure positive stopping of the engine.



**Lightweight Stabilizer**: Constructed of a very high-strength material being developed by engineers of Chance Vought Aircraft division of United Aircraft Corp., this Cessna stabilizer is so light it can be handled by a girl.

## New Aluminum-Balsa Laminate Developed

A new lightweight, high-strength construction material is being developed by engineers of Chance Vought Aircraft division of United Aircraft Corp., and will be the stiffest and highest aircraft material known.

Named Mykite, the material is seen as reducing skin wrinkling to a minimum and cutting down paint-on drug because while joints can be reinforced with low-stress protrusions. Because of its great strength fewer internal supports and stiffeners are needed.

• **Details of Construction**—Mykite consists of two thin sheets of aluminum alloy with balsa wood core. The core and faces are bonded together under heat and pressure.

The material has proven successful in more than a dozen experiments and is now being used in the Chance Vought F4U Corsair. The company now is designing new aircraft which will utilize Mykite to a greater degree.

## Kellett Reports Orders Totaling \$3,355,335

Booking of unfilled orders at Kellett Aircraft Corp. on Dec. 31 amounted to \$3,355,335, of which approximately \$850,000 represented

contracts with the Army Air Forces for experimental helicopter programs.

The helicopter remains the primary production of the company's present plant, calling for a public announcement of an important commercial helicopter program later this year.

• **Report Pending** — Wallace Kellett, president and the company has prepared preliminary designs for both large and small helicopter types in current design competitions, representing sales opportunities of several millions of dollars.

Kellett's \$1,000,000 in commercial work lies in diversified manufacturing fields including large quantities of refrigeration and heating equipment, even moderate aircraft metal tanks and auxiliary aircraft assemblies for Fairchild's C-62 Peabody cargo plane, agricultural machinery parts, electrical and electronic articles and substantial tooling and experimental orders.

### Principal Customers Listed

Among the principal customers

Kellett is serving are RCA Manufacturing, Westinghouse, Celotex Corp., Wilson Magazine Camera Co., Wilcox Refrigeration, Job Safety Car Heating and Lighting Co., Prudential Corp., General Electric, New Haven Machine Co. and other manufacturing companies.

Operations of Kellett during 1945 produced a net profit after taxes of \$211,381 or 51 cents per common share compared with \$143,800 or 33 cents per common share in 1944. Despite heavy contributions of war contracts in August and September sales last year were \$10,273,428. Net current assets increased during 1945 from \$534,000 to \$1,377,855 or 45 percent. Current assets at the year end were \$2,183,500 against \$1,067,714 at January. Initiates Company balance sheet showed \$715,507 in cash and U. S. Treasury securities.

## Curtiss-Wright to Leave Buffalo in June or July

Curtiss-Wright Corp. will end its operations in Buffalo in June or July the \$15,000,000 government-owned plant at the Buffalo airport having been sold to Westinghouse Electric Corp.

C-W's remaining plant operations rights on April 15 but has arranged with Westinghouse for future space until its termination work is completed. The company's operations will be centered at Oklahoma City.

## THE NEW

# STROMBERG PS SERIES INJECTION CARBURETOR



protects light planes  
from the hazards of  
carburetor ice



# Bendix

PRODUCTS DIVISION  
Bendix Aviation Corporation, South Bend 20, Ind.



Many hours of testing both in the laboratory and in flight prove that normal icing caused by fuel vaporization is eliminated in the new Stromberg PS Series injection carburetors.

In this type carburetor the point of fuel discharge is not within the carburetor itself as in float-feed carburetors; instead fuel is discharged past the air stream so it leaves the carburetor and enters the engine manifold. In this way no frost can form on the refrigerating effects of fuel vaporization is eliminated.

In addition, Stromberg PS carburetors give the light plane all the other advantages of injection carburetors which, as external equipment, contributed so importantly to the outstanding performances of All-American aircraft during the war. Stromberg PS Series injection carburetors are made in a number of sizes to cover the range of 30 H.P. to 300 H.P. engines.

Whether you are an airplane owner or manufacturer, specify Stromberg PS Carburetors for your new plane. *Specs are up.*

## Brodie to Produce 'Clothesline Airstrips'

Capt. James H. Brodie, inventor of the "clothesline airstrip" — the Brodie system for landing small airplanes on overhead cables — is preparing to produce a commercial version of the apparatus at Baltimore.

Brodie has ten pilot, Rayman A. Gregory, have applied for a Maryland charter in the name of Brodie Engineering Corp., at Baltimore, and are continuing negotiations in the production of the commercial "aerial runway" in the plant of Maryland Engineering Co. in Owings Mills, where the AAF Brodie systems were made. Brodie hopes the first commercial system will be ready for delivery in about four months.

**Prospective Users**—Principal commercial use for the apparatus is expected to be for air taxi services. Most engineers expect it will be several years before suitable helicopters will be available for such a service between central business districts and airports. Brodie anticipates to bridge this gap with his new invention.

As used by the Army, the Brodie system was designed to permit landing and takeoff of small liaison-type planes of about 2,000 pounds

gross weight, from a 300-ft steel wire suspended between masts 40 ft high by hoisting coils in a trailer.

**Costs Outlined** — The Army-size Brodie system cost approximately \$4,300. A larger system capable of handling planes up to 7,000 lbs gross weight (including virtually all single-engine twin planes), would cost about \$11,000.

Brodie sees possibilities for still larger systems which could handle twin-engine transports or large aircraft. Design DC-3s had a maximum takeoff weight of double cabin, and strongly built towers, of greater height. Such an installation might cost from \$50,000 to \$75,000.

**Troubles Called Easy**—To civilian flyers who question their safety to land and takeoff on the aerial runway, Brodie points to a statement in an Army instruction manual, which says: "Any pilot capable of handling a plane in normal flight can land and takeoff from the rig with a minimum of trouble."

Brodie says an pilot yet been hurt in a cable hoisting or travel.

## Continental Diesel Has Unique Feature

Continental Motors Corp., maker of several models of aircraft engines, will begin production this month of a new line of diesel en-



**Second Stroke**—Cross-section of new diesel combustion chamber developed by Continental Motors Corp. Expanding gases from "Dyna-cell" (A), an auxiliary combustion chamber, feed back into the main combustion chamber (B), propelling the piston rapidly. Fuel injection nozzle is seen at C.

gines for industrial and nonaviation transportation uses, president C. J. Ross announced.

Five models will comprise the Detroit firm's initial diesel offering. The engine ratings will be 25 to 150 hp. Many parts will be interchangeable with parts of the company's gasoline engines.

**Dyna-cell Is Moved**—In a departure from conventional design, Continental claims will envision a small auxiliary combustion chamber opposite the fuel injection nozzle. Tipped a "Dyna-cell," purpose of this chamber is to provide a smoother piston stroke. Part of the means of fuel from the injection nozzle explodes immediately in the combustion chamber; the remainder of the fuel ignites in the Dyna-cell and the gases thus explosive feeds back into the main chamber to furnish more constant power to the piston throughout its stroke.

## Breese Officers Renamed

Directors of Breese Corp., Inc., were unanimously reelected at the annual stockholders meeting and reelected all officers. They are John T. Breese, president; John P. Lucas, vice-president; Fred G. Shoppa, treasurer; David T. Wirkola, chairman of the board which consists of these four and Frank C. Madsen, president of the Paulsen-Jensen Corp. and Robert E. Rasmussen, president of Federal Laboratories, Inc. Herbert J. Dreyer was reelected secretary.



## HOUSING PROBLEM ANSWER?

Breath Aircraft Corp. expects to be building 200 of these houses a day soon after the start of 1947, according to Werner Wolf, president of Fuller House, Inc., which will market the dwelling designed by R. Buskirk-McCuller-Pulfer who prepared the old Dynamite house (AVIATION NEWS, March 23). The houses will be subcontracted to contractors from whom will come average technology, with some mass production methods. Wolf and Pulfer see the new dwelling, which will sell for \$8,000 erected, as the answer to the housing problem. City building codes are the big impediment to increasing the output of the dwelling.



# The man of the house has his mind in the air

Straight thinking, practical, full of common sense, the average American male has high-flying ideas today — plans of owning his private plane, estimates of its features, costs and advantages. He wants to be told about the new planes — but in between language. He intends to understand this new avionics — but in his own terms. He's still talking about chocksabes, for example, not instrument panels.

That's why Tim's new "Plane of the Month" article is so popular with Tim's readers. There they find clearly stated, authoritative data about planes on the market now. They trust Major Donald J. Hayes, the ex-mechanic pilot who is now Tim's Aviation Editor — he knows flying, he knows planes, he imparts his personal experience with the famous Plane of the Month. This is only one of the many reasons why a million men a month buy Tim.

**THE MAN'S MAGAZINE**

**true**

Sells men for you

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New York, N.Y.  
Daily League publication  
of weekly magazine





## Canadian Surplus Put To Many Unique Uses

Many new uses for aircraft parts are being found to bring a return to the Canadian government for wartime plane equipment through Canadian War Assets Corp.

Aircraft generators, for example, which were charged batteries for many months now are supplying electric power to Canadian homes. About 100 of these generators have been sold to a company of air force and navy veterans, American Mechanical Salvage Co., Ltd., St. Louis, Que., and to Aircraft Supply Co., Terrebonne. The generators are rewound to supply 110 volt instead of the 24 volts for which they were designed. They are operated by 5 hp gasoline engines.

**Other Unique Uses**—Other surplus aircraft parts in demand are wing fuel tanks for conversion into water storage and domestic fuel tanks, aircraft seats, and airplane seats. These are used for tennis, steering controls for racing boats, and for ski harnesses; observers' head harnesses used by navigators for use by prospectors and timber surveyors and altimeters for use by surveyors.

### Miles Aircraft Building Twin-Engine Messinger

A twin-engine version of the Messenger, single-engine low-wing monoplane, has been put into production by Miles Aircraft Ltd. The craft powered by two 100-hp engines can take off at only 133 pounds and fly at 8 mph wind and climb to 50 ft. in 310 yds. at an all-up weight of 2,664 lbs. At the same weight it has a top speed of 159 mph and cruises at 130 mph.

Structurally the single-engine Messenger needed few alterations to convert it into the twin-engine Grouse. Basically, the wings, fuselage and tail unit of the new plane are almost identical with those of its predecessor. The Messenger was equipped with a fixed landing gear, while the Grouse has a retractable undercarriage, the tail and wheels being driven up into the under sides of the engine nacelles.

### Packard Working On Jets

Packard Motor Car Co. is experimenting with jet propulsion aircraft engines for the AAF at Willow Run Army Air Base and at the company's plant in Toledo, Ohio. President George T. Christopher, recently in the United States,

## A B & H Development PRE-SHAPED SPRING WIRE



The development of a method for low cost, volume production of precision locking rings etc. will be B&H's answer to a desperate need for parts for a staggering expansion of airplane engines. Existing methods of ring making were not practical from a new material, manpower or machine tool standpoint.

You can take advantage of the B&H method of ring production that has not only saved much in engineering and metallurgical standpoint but a method that will give you the type of ring to meet your specific condition accurately, in quantity, and with a big saving of material and costs.

### OUR NEW BOOKLET

Shows complete details on all types and sizes shapes and styles. The modern equipment Butcher & Hart have available to meet your most exacting needs. Send for a copy today.

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PRECISION LINERS  
OIL SEAL RINGS  
SNAP RINGS  
SPACERS  
**BUTCHER & HART**  
MANUFACTURING COMPANY  
TOLEDO, OHIO



## PERSONNEL

### Van Horn to Direct BNF Maintenance, Engineering

**Gen. H. Van Horn** (photo) has been appointed director of maintenance and engineering of British Airways, Ltd., a newly-created position. He will supervise the organization, maintenance, and inspection of generating and communications departments of the company's aircraft and components service, and Gen. Charles E. Taylor becomes chief of the Instrument Approach Production Section.

**Franklin F. Vassalli** has rejoined Eastern Air Lines after Air Transport Command service, as manager of the re-created maintenance division with headquarters in Chicago. Engaged in completed the transition from military aircraft to commercial aircraft, Vassalli was originally assigned to the aircraft shop at Kelly Field and later joined War Assets Corp., where he has been consulted in engineering and research.

**Walker H. Johnson, Jr.** (photo) has been appointed eastern regional aeronautical manager for American Airlines System with headquarters in New York. Mr. Johnson, Robert K. Watson who has been appointed general sales for freight division, and R. L. Clegg, formerly released from the Marlin, Johnson formerly was general superintendent of express traffic.

Capt. Richard A. Hardig, on temporary leave from the Army Air Forces, has been appointed manager to the president of the Alaska Tugboat Association, Capt. John J. Purdy to replace the late Capt. Capt. Hardig was vice-principal manager for the Independence Star.

**L. G. Stevens** (photo), wartime safety personnel manager for Goodyear Aircraft Corp., has been named division personnel manager for Good Year Tires. Capt. R. Rubber Co.'s northeastern sales division has been replaced by Captain G. Jones, formerly head of the labor personnel department.

**G. Jones**, formerly head of the labor personnel department

**Art H. Bedford** has been appointed superintendent of the CAA's Air Navigation Facilities Plant and Structures Branch in the South Region. Bedford formerly was assistant chief of the Airways Engineering Division at headquarters. Other CAA assignments include the following references. Col. Edgar B. Franklin becomes chief of the Scheduled Air Charter section, Comdr. John R. Hart is returned as chief of the Schools and Training Section, Plant and Equipment Services, Maj. Gen. J. Ferrier is chief of the Materials Testing Department, Aircraft and Components Service, and Col. Charles E. Taylor becomes chief of the Instrument Approach Production Section.

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completing the transition from military aircraft to commercial aircraft, Vassalli was originally assigned to the aircraft shop at Kelly Field and later joined War Assets Corp., where he has been consulted in engineering and research.

**Palmer Nichols** has been named vice-president and general manager of Alaska Airlines Corp. and as such will be in charge of the Pacific Northwest and West Coast Services, no longer limited to handle West Coast sales and service for eastern divisions.

**Alfred Shore**, formerly in the Naval Reserve, recently joined the New York office of Alaska Airlines, National Airlines, and Hawaiian Air Lines.

**Tourism** nationally-known aviation leaders who are operating in various aviation research with the University of Illinois Graduate School of Business Administration, are continuing their work as an advocacy committee for the school's postwar program. The committee is headed by William A. M. Banks, assistant secretary of the U.S. Civil Aeronautics Board, and members are George T. Christopher, president of Packard Motor Car Co.; Ralph E. Green, George P. Baker, William E. Hartung, John A. Herkimer, Albert L. Edwards, Victor Emanuele, Alfred Macmillan, Joseph Galante, H. H. House, Edward Warner and G. Douglas Dillman.

**Mal. Vincent D. Salk** has been appointed purchasing agent for Air Cargo Transport Corp., Newark, N.J.



**Lt Col A. Peke de Post, Jr.**, has been elected to the board of directors of All American Aviation, a company originally organized by his brother, the late Gen. de Post. Col. de Post, who served in the Air Transport Command, was vice-president of AAA and a member of the board until 1942, when he resigned to enter the AAF.



**W. der Ginst** has been appointed general passenger agent for TACA Airways with headquarters in Miami. He is an investor and manager of aircraft freight loading and cargo handling facilities. William J. Peacock, formerly managing director and manager of TACA Airways in Miami, Florida, a Navy veteran, tragically was with Transcontinental & Western Air, Inc.

**Charles E. Stryker** has been elected president and general manager of Adel Products Corp., of Binghamton, N.Y. He formerly was vice-president and general manager in the production of the Bingham Manufacturing Co. of Binghamton, N.Y., a manufacturer of sheet metal and heavy machinery.





## Tomorrow's Leaders are Training Today

Today's sons and daughters of the American farmer—tomorrow's leaders—are training for their future at agricultural schools, as any other school in the land.

On May 1, thousands of the 6,000 students, themselves and their parents, will converge on Washington, D.C., to demonstrate their knowledge and their strength. They have come from every state and territory, from every walk of life. The 4-H Clubs and "Future Farmers of America" are evidence of these conditions and understandings. All these and many more are the results of work done by the County Extension Agents in their complete extension of farm work to every way and means.

County Extension considers it a vital part of its program to report regularly on 4-H and FFA activities. To offer complete and accurate information, it has also now organized Statewide Board. These youngsters, month after month,

County Extension's attention to tomorrow's farmers, these younger members of the family, is another reason why this magazine is considered a "must" for America's

youngsters. . . . The future will be shaped if and the future's leaders trained.

### Facts of Special Interest to the Aviation Industry:

Survey shows 80% of present planes will be sold to residents of rural areas.

In Kansas 55 out of 10,000 farm families intend to buy planes or expect only 10% out of 10,000 city families. Rural families—even in several states—purchase and consume 80% of all America produced.

Farmers' incomes have declined in the last five years.

Country Gentleman's readers are concentrated among the top half of farm families.

# Country Gentleman

NATIONAL SPOKESMAN FOR AGRICULTURE  
A CURTIS PUBLICATION

## SPECIAL AIR SERVICES

CHARTER

NON-SCHEDULED

INTRASTATE

## Texas Air Lines, New To Field, Serves About 50 Communities

In business little more than three months, firm operates 15 aircrafts and has 20 Beechcrafts on order; reported already "in the black," it has cut rates to 6 cents a mile.

In little more than three months a newcomer to the federally-authorized air transport field, Texas Air Lines, operating daily schedules, has built what is probably the most extensive intrastate air network in the country.

Operating about 36 chartered and flying at a rate of more than \$100,000 per day, the new airline, the company claims, it already is operating in the black, and has made its first passenger fare reduction to six cents a mile.

**To Carry Mail Free.**—Officials have told Post Office Department and CAB authorities in Washington that they will carry mail free, as it cost, on any route in the state to determine how much mail can be processed at best points and recently filed application with CAB for a certificate which would permit it to carry mail.

Cyril P. Brown, owner of TAL, expects shortly to form a Delaware corporation with a capitalization of \$400,000. The present aviation is 1943 as operator of Cunningham Airport at Jeppesen.

An president of Brown-Newsway Co., Brown took over Cunningham Airport previously as a repair and maintenance base. With the property used for purposes of aircraft types and Brown owned the flight training, charter work, and light freight carrying fields. As the charter work swelled in volume and demanded more aircraft, it finally was dissolved from Brown-Newsway Co.

**Began Operating in January.**—Texas Air Lines began operating Jan. 15, 1946. It now has 10 inter-passenger UG-75 Comets. The company has an order 39 Beechcraft D55-C and 10 other planes, six of which are to be delivered in either April or May. The balance of the order is slated for September delivery.

calming, is due largely to a fuel control under which gas will cost 6 cents a gallon after water tax refund, and oil 48 cents a gallon.

TAL began operation in the eastern part of the state, flying from Dallas to Galveston, Brownsville, Dallas and Fort Worth. Now, after some operating, shortly to be put into service are routes which link the eastern and western, and the northern and southern boundaries.

**Basic Basis Given.**—Average distance between stops is about 72 to 130 miles, with the longest city being served—Houston—having a population of 942,000, and the smallest—Alpine—having a population of 3,000.

In all, 12 routes are operated: Houston to Brownsville via Victoria and Corpus Christi; Brownsville to Laredo, Houston to Fort Worth via Bayou, Terrell, Waco and Dallas; Fort Worth to Houston via Dallas, Cleburne and Palestine; Houston to San Antonio via Kerrville, Laredo, New Braunfels, San Antonio via La Grange, Eagle Pass, Del Rio, San Angelo, Big Spring, Lubbock and Plainview; Houston to Galveston.



**Intrastate Network.**—Texas Air Lines expects to have in operation by April 30 all the routes shown in dotted lines on the above map, as well as those in solid lines which it is already flying. Company is adding the wire routes at fast as possible. When its additional planes are completed, TAL is expected to have the nation's largest intrastate air network, serving nearly 50 communities and flying more than 2,000,000 airplane miles annually.

ter, Houston to El Paso via Austin, Joanna City, Junction and Fort Stockton, Laredo to Fort Worth via Corpus Christi, San Antonio, Austin, Bryan, Temple, Waco, and Dallas, Houston to Corpus via Lubbock, Amarillo to Fort Worth via Paris, Greenville and Dallas, and Houston to Laredo via Wichita, Corpus Christi and Abilene.

## NEW DEVELOPMENTS

### Hoosier Air Freight Maps Stock Issue

A stock prospectus covering \$20,000 U.S. corporate bonds has been issued by Hoosier Air Freight Company, newly-organized firm headed by former controller of the insurance division of Farmers Walby & Co. Ltd. Underwriter is Donald Young & Co. Proceeds from the public offering of \$15.5 a share would be used for working capital.

Incorporated in New York in February, 1948, the company reports it has been studying air freight possibilities since 1944, and last year operated one plane over more than 10,000 miles of experimental freight routes.

**Stock Price Premium.**—The results have demonstrated that there is a very large volume of valuable cargo which can be profitably moved by means of air freight, the company announces. "Contacts have been made with executives of numerous industrial establishments, as well as with wholesalers, retailers and officials of various chambers of commerce."

A fleet of six C-46s is proposed. Initial operations will be between North Atlantic and Midwest points. CAB applications are on file and contract flights would be started shortly. The promoter makes the point that "it is felt there should be enacted legislation extending economic regulation to contract carriers. It is expected that many corporations will include a 'grandfather clause' permitting contract carriers engaged in rendering a satisfactory service to qualify under the new legislation with a minimum showing of actual operation."

**Insurance Arrangements Listed.**—Company reported will carry cargo liability insurance up to \$100,000, with fuel at a limit for any single accident; hull coverage per plane will be \$30,000. Liability and property damage coverage will be \$60,000 maximum, public liability \$100,000 to \$300,000, plus workmen's compensation according to

various state regulations and group insurance for flying personnel.

**Officers Listed.**—Officers include President Joseph E. Rapers, for 15 years a Fortune stockholders executive. Since 1946 he has been eastern representative of Quality Tool & Die Co. He is also president of J. E. Rapers, Ltd.

Li. Col. William J. Crawford, vice-president in charge of operations. He formerly was chief of staff of ATC South Atlantic Division at Miami, and deputy commander of Miami Army Air Field.

M. E. Davis, vice-president in charge of contracts and maintenance. He was senior field service representative for Douglas.

Directors are R. W. Rice, a partner of Davis & Davis, New York air controllers; Howard B. Lester, Washington D. C., and Brig. Gen. LeGrand W. White, former 8th Air Force chief of staff. Dr. John D. Crane, of Transportation Analysis, Inc., Washington D. C., is economic advisor.

**Other Developments.**—Other developments in the field include:

**Arizona Airways.** Phoenix has begun passenger service of one round-trip day with a converted DC-3, over a route connecting Phoenix, Tucson, Flagstaff, along the U. S.-Mexico border to Nogales,

Willcox, Safford, Glendale and Phoenix. Richard J. Scott, formerly a TWA pilot and later with ATC, is the company flight operations manager.

**South Central Air Transport, Inc.** Faymoread, Ark., has received assistance of an interstate equivalence from Arkansas Public Service Commission, and is purchasing six surplus Convair UC-118s. Company, mostly employing Arkansas business men, will start service probably sometime in June. Passenger and cargo service is proposed to 24 states.

Moore's charter and executive airbus soon will move from the 36th St. Airport to the adjacent Army air base, rehousing companion. Most of the truck services still are at the 36th St. center.

**Florida-Fresh Air Express, Inc.** Lakeland, Fla., shipped its first plane-load to Seattle with 5,840 boxes of strawberries packed in Florida two days before they were placed on sale in Washington state. The plane returned to Florida with 134,000 dollars.

**Western Continental Air Lines.** Grand Central Airport, Glendale, Calif., has a new Convair 440-200 and twin Convair on chartered passenger flights to vacation resorts. Operators are Conard Wilson, Conard and Lt. Cmdr. Roy Hardy, Jr.

## New Services Allocated Planes

Air Force veterans setting up after World War II and frequently allocated aircraft again lead the list in the two latest allocations of surplus transports by the War Assets Administration. Headlines are Douglas C-47AAs, C-47Cs, C-47Fs, Bellair AT-10s and AT-10s, totaling 15 aircraft.

Domestic allocations, other than to scheduled carriers like Transocean, include:

**Georgia-CANVAS.** Major J. Wren, President, Atlanta, Ga., Atlanta, Ga.; California Eastern Airlines, San Francisco, Calif.; Transcontinental & Western Air, Memphis, Tenn.; National Air Express, Memphis, Tenn.

**Georgia-CALIFORNIA.** Major J. Wren, President, Atlanta, Ga.; Georgia-CALIFORNIA, Atlanta, Ga.; Charter Air Lines, Atlanta, Ga.; Charter K. Morris, Long Beach, Calif.; Carl Lawrence, D. P. Parker, Atlanta, Ga.; Georgia-CALIFORNIA, Atlanta, Ga.; Eastern G. McElroy, Atlanta, Ga.; Eastern G. McElroy, Atlanta, Ga.; Georgia, Gary, Ind.

**Illinois AIR-FARE** (All references, See Illinois AIR-FARE, page 3, Harry C. Conner, New Jersey City, I. Conner)



## A TOLERANCE PROBLEM in STAINLESS!

### JET ENGINES ARE HARD TO MAKE

Specifications called for this stainless sheet metal fairing assembly. Notice the reflected tolerances! A tough job in any sheet metal—a terrific undertaking in stainless steel!

### BUT SOLAR TACKLES ANY STAINLESS JOB

Utilizing the exclusive SOLAR-DIF process of forming and Solar's own specially developed welding, fitting and precision tooling, Solar's engineers and craftsmen mastered these exacting tolerances under successive production contracts.

### SO IF YOU HAVE A TOUGH PROBLEM ...

which requires nonhazing corrosion or heat-resistor stainless steel. Put it up to SOLAR engineering and production skill. Our assist office is ready right now to help you tailor stainless steel to your special needs.

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AIRCRAFT COMPANY

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## FINANCIAL

### Revived Hope For Airline Shares Expressed By Financial Services

**Standard & Poor's** current **Outlook** maintains "buy ratings" on America, Eastern, Northwest and PCA stocks.

Revised hope for airline securities is again being expressed by a few financial services.

**Standard & Poor's**, as its current **Gulf Oil**, has reinstated "buy ratings" on four airline stocks. This service refers to the 14 major recommendations, when buy recommendations were removed as these stocks because prices were near the top of a long and unusual advance. Moreover, the speculative outlook was considered uncertain.

**See Large Earnings Possible** Prices for the shares, however, are now down to levels which largely reflect lower earnings, according to **Standard & Poor's**. They assert that as a result of the expansion of new aircraft, the market price of aircraft selling continued up, while air transport companies should again be able to show extraordinary earnings progress.

Accordingly, they have restored buy ratings on America, Eastern, Northwest and PCA.

**Americana** Gains Sharply — It should be noted that **Americana**, largely on the speculative stimulus of its pending five-for-one stock splitting, has been unusually strong, sporting more than seven points in the market session following announcement of its proposed action.

A New York Stock Exchange firm, **Bernhard & Co.**, recently issued a sharp study of the airline industry with a specific recommendation to purchase **Chase & Southern Airlines** Inc. As a conservative view of the industry is advanced, **Bernhard & Co.** do not attach great importance to 1945 earnings, considering that latest news shows while gross revenues advanced sharply.

**No Comparative Figures** Given No comparative figures are presented, showing why **Chase & Southern** is better situated than any other airline. A historical review of the company, its present position and future prospects are discussed in some detail.

### Douglas Net Income Was \$8,955,754

Douglas Aircraft reported net income of \$8,955,754 for the 1945 fiscal year after taxes. From sales of \$744,832,884 in the 12-month period ending May 31, 1945, the company paid \$25,000,000 in direct federal, state and local taxes; \$390,000 in wages and salaries to employees; \$20,000,000 dividends to 5,703 stockholders who received \$4 per share on 664,800 shares outstanding.

Although sales for 1945 were only 34 percent below the 1944 figure of \$1,061,407,455, the last quarter of 1944 showed only approximately 14 percent of the total

### Aviation Officials Continue Selling

Aviation stocks continue to be sold by officials, the majority of Jersey transients part released by the Securities and Exchange Commission reveals. Stock selling appears to have taken place prior to the subsequent price rise.

Various firms with an additional 4,000 shares of Aviation Corp. common stock released by holdings to \$5,000. Another 18,000 shares were owned through a mortgaged company, **Aviation Corp.** Holdings of **Aviation Corp.** also retained 10,000 shares of common William F. White, as May, 1945, received an option to purchase 50,000 shares of Avia common stock at a price not revealed. The following disclosure of stock ownership by **Aviation** officials in the December SEC reports:

**Conover Reports Options** — The latest option report and also shares of **Conover-Vanderbilt** Corp. options granted for the purchase of **Convair** common stock at an undetermined price was as follows: Harry Woodward, 30,000; William A. Rines, 3,000 and V. C. Schubert, 3,000.

Frank M. Fairchild disposed of 14,000 shares of **Pearlitol** Engine & Airplane common stock, leaving 186,150. Continuous liquidation of **Paper Aircraft** common was also in evidence. Ted W. Wild sold 5,000 over a three-year period to \$10,000. J. E. Brown sold 4,200 keeping 17,800 and Gordon M. Carter disposed of 3,000 retaining 7,000.

**Major Purchases Noted** — The only major aircraft purchase belongs to J. L. Atwood, who bought 1,000 shares of **Delta Air Lines** holding his total holdings to 1,300. Transactions were rare indeed in the airline group. T. B. Russell

of the airline group T. B. Russell



By Major Al Williams, alias, "TATTERED WING TIPS," Gulf Aviation Products Manager, Gulf Bldg., Pittsburgh 36, Pa.

this magazine, you read about improved aircraft engines.

And, every time an engine is improved, changes in the proper lubricants have been made more difficult and more varied.

Lubrication plays down prop rpm speeds, and they still introduce certain prop-shaft pressures—which must be borne by a film of oil. The improvement was a great achievement for propellers one of the keenest problems ever had to lubricate and��able propeller pitch angles, higher compression ratios, and a dozen other engine improvements, have all contributed special problems to aviation engine lubricants.

Wouldn't you like problems to



instead you how important the **Alektor Phoenix**—Gulf's own refining step—is to you? Not by extracting more oil from the same amount of crude, but by improving the quality of the lubricants.

Pretty soon, off the glorious wings that will hold (and reward) I shall fly to sunny aviation and conclude, "So I picked the 'Landing' because—and here it is! The 'Landing' because—and here it is! The 'Landing' because—and here it is! The 'Landing' because—and here it is!"

What does it all signify?

#### MERRY-GO-ROUND

Every time you pick up a paper, or and

DON'T TIGHTEN FUEL-HOSE CLAMPS EXCESSIVELY! IT DON'T GIVE A BETTER SEAL.



BUT ONLY OVERDRIVE THE HOSE ITSELF UNDERS THE CLAMPS!



AND IT'LL RUPTURE THE FUEL-HOSE AND WASTE SOME OF THAT PRECIOUS



BODD GULF AVIATION GASOLINE!



Marlin, Tex., is something of an aviation pioneer. He is the first man to build a twin-engine P-51 (bottom right). See the following "FACTS."

England's first twin-engine plane was used by the English Royal Air Force in World War I, while these planes were installed on the G-36 in the early 20's.

The first P-51 was a Republic designed for a French competitor in P-40's. And Charles L. Toko, Kansas City 3, Mo., is aeronautics for

"I dropped a fast spar, the others broke too. Biggest Wright boat will catch me in a line about 20 miles long."



That's all there is to it... Small "fact" and proof so as the audience on the top of the page, and suddenly, this may be just what this is all about. Let's see if we can make a Generation of Pech Pilots (hi).

**Gulf Oil Corporation and Gulf Refining Company...makers of**

**GULF AVIATION PRODUCTS**



**SLIDE RULE!**

A fine old proverb long ago measured reputation as slide rule ratio—"a man is known by the company he keeps". . .

So, too, the measure of a product's value is revealed by the character and integrity of those who sell it.

We believe that no finer warranty of our product's merit can be offered than our *True Colors Edition of Aviation Landaus*—the distribution is limited<sup>12</sup> on the right and the two hundred authorized dealers who will sell and service the Republic Sedans throughout America.

<sup>4</sup>Maritime piracy seems to pose yet another threat to a more sustainable future.

*Seabee* 

TRANSPORT

**Second Report from Sullivan  
On Airmail Due About July 1**

Says first one neatly indented important points which need to be developed, inspectors will make weekly summaries as to overall study in field progresses.

By MARILYN MUCKEL

effect of reconsolidation, as is evidenced by the studies now underway.

Jalilov's comment his first report (*Azovnews*, Moscow, March 25) on the future of aerial transportation as incomplete: "job that averly indicated separate points yet to be developed." The real work of doing the anesthesia," he says, "is just going to begin."

**Weekly Experts Issue**—Last week he was reiterating 14 selected problems important to explain the studies. Registration was that they would leave Washington Friday to start the work. Weekly reports will be filed as far as progress, and under Baltimore's direction these studies will be completed as soon as possible. This will be accompanied by a series of three detailed information on our resources, state patterns, and the prospects. Four or five month-long

Although these studies doubtless will overlap, the issues will deal generally with the subject of rates, development of the national route pattern, foreign-owned, and holding facilities and writing equipment, and government cooperation—whether the federal state or municipal—in the relation of aerial carriers.

**Supported by Bannana** — In financing these surveys, Balfour has the support of Postmaster General Bannana, who accepted the preliminary report enthusiastically, then instructed that the important thing was to follow through.

American, Eastern, TWA and United is 44 cents. For half-a-degree other carriers it remains at 60 cents, while some receive mail pay on a mileage rate applicable to passenger load and base mileage.

Sullivan's suggestion that a study be made to determine whether another than the pound-a-mile basis "warranted for both the air carriers and the Department," can be used in computing annual transportation costs has been made before. Department sources don't know the answer yet, but feel that some other arrangement would expedite payments and eliminate disagreements in computation.

**Charter Study Suggested**—Charter of planes exclusively for mail should be studied, according to the report. Leased to agency and operated on schedules suited to Postal Service needs, weight of the mail they carried would not have to be recorded or computing payments on a pound-per-mile basis.

Softwax finds that the air carriers do not have sufficient aircraft or the airweather performance required to provide the degree of schedule regularity required for efficient postal service. In addition, the Department does not have adequate facilities at airports for handling such volumes of mail: "un-needed first-class and annual combined

**→ Mail Net Failure**—Growth of pickup and feeder service should be limited by regulations until the Post-



**Passenger-Pickup Combination:** The originally conception of a two-passenger combination mail pickup and passenger plane was drawn by All American Aviation, the nation's only pickup operator, to illustrate its structure. The company has asked CAA for permission to carry passengers as air pickup routes. Each set of the mail compartments (each having a sliding door) provide space for ten passengers. Photo: aviation records, drawing of the Lockheed Star (AVIATION NEWS, May 25, 1944).



### BRITAIN'S NEWEST AIRLINER:

The Avro Tudor II, Britain's newest and largest airliner, has completed first test flights successfully at Woodford Aerodrome, Cheshire, England. The huge transport was six times faster than half-mile run. Four Rolls-Royce 1,770-hp engines give a 300-k-mph maximum cruising speed and a 255-mph top speed. Wings span is 120 ft., length is 102 ft. 2 in., height 34 ft. 3 in. The payload, 11.5 cu. m. diameter, will seat 48 passengers or handle nine tons of cargo in 4,000 cu. ft.

partner has decided on a pattern for road carriage consistent with the economical use of all forms of transportation. Started the practicability of helicopter operation, and decided where additional highway post office lines shall be established.

In negotiating sharp cuts in foreign airmail postage, Sullivan proposed a study to find effects of setting the same rates for transporting mail from foreign countries as paid by this country to U.S. transoceanic carriers. This likely would reduce applications by foreign carriers for air routes to this country, and might in turn lead the U. S. to exchange agreements under which the carrier would seek part of its mail by foreign air carriers of their country and U. S. carriers "appear desirable to keep costs down and efficiency up," the report asserted.

### Government-Owned Line

#### Pressed by Australia

The Australian Government has advised immediate preparations for a Commonwealth-owned air service despite an Australian High Court decision that in effect declared invalid the Commonwealth's right to nationalize Australian airways. **Will Compete With Private Lines**

The new service will compete with privately-owned airways, following the court's ruling that the government could not enforce a monopoly. Prime Minister Joseph R. Lyons announced that a commission of five would manage the government service.

#### Intervenor Right Widened

Chambers of Commerce and civic organizations of similar character will be permitted in the future to intervene as parties in rate cases and other formal proceedings before CAB. In the past two groups have been permitted to attend hearings and present evidence relevant to issues under consideration but have not been able to testify as intervenors in their own rights.

#### N.Y.C. Air Express Soars

A 31 percent gain in air express shipments of New York City in February over the same month last year has been reported by Air Express Division of HALCYONE Express Agency. Among the 63,936 packages were machinery, vacuum tubes, style gowns and cut flowers.

## Ocean Service Plans Announced By British

Plans to incorporate London-New York flights around July 1, and details of a new trans-Pacific service, were announced recently by British civil aviation officials.

The trans-Atlantic route will be flown with five Constellations now in order, and BOAC officials hope to develop the service in a frequency of one round-trip daily. Flights probably will stop at Gander and St. John's.

**Pacific Plan Revealed** — Two trans-Pacific flights weekly are contemplated on the Pacific route by British Commonwealth Pacific Air Lines, a joint Australian-New Zealand-United Kingdom company, as soon as equipment is available. The projected route originates at Auckland, N. Z., and Sydney, Australia, touches the Fiji Islands, Cocos Island, Honolulu, and San Francisco, and terminates at Vancouver, B. C.

#### Other new services

Trans-Canada March 1 increased schedules between Montreal and the Atlantic in four round trips weekly.

Ultimate — April 25 will incorporate direct flights between Montreal and Ottawa, Canada, on newly-öffened ACP 10 and TLP 100 routes. The 100 route covers the distance of Moose Jaw-Winnipeg and Brandon, N. B., via St. Boniface. Work is progressing rapidly on some schedules where adequate facilities are available at those airports.

Winnipeg — April 25 will incorporate AM 48 between Denver and Los Angeles. Schedule problems have been solved and the new route has encouraged passenger reaction to British trans-Atlantic flights. The DC-4 will inaugurate the service on April 15. The DC-3 will start the operation on April 19.

Seattle-Toronto DC-4 service begins April 15.

## N. Y. C. Airport Authority Bill Passed Despite Airline Opposition

State Legislature approves measure in face of sued taken by 15 carriers holding leases with city for use of Idlewild, sends it to Gov. Dewey for signature.

Although faced with opposition from 15 airline holding leases with the City of New York for the use of Idlewild, legislation to create a New York City Airport Authority to manage that airport and LaGuardia Field passed the State Legislature last week and went to Gov. Dewey for final approval.

The bill would set up a body to acquire, construct and operate airports in New York City. Bonds might be issued, and the city would be permitted to convey LaGuardia and Idlewild airports and property to the authority without consideration.

**Objections Outlined**—Participating airlines were American, American Overseas, BOAC, Colonial, Eastern, National, Northwest, Pan American, PCA, SIA, Trans-Canada, TWA and United. They objected that passage of the bill would endanger the city's position to avoid restraints of commercial aviation "because the state's sovereignty over aviation in an area containing more than half its total population, lies with State and City governments."

**Other Developments**—Those were those three airport developments elsewhere:

**Oklahoma**—The City reached this to Gravelly Flats Airport Park, Tulsa County, Okla., from the Federal Government. It is about the War Assets



**Lockheed Terminal Development.** Due to be completed this summer are three new hangars and other construction at Lockheed Air Terminal, Burbank, Calif. They will bring to 267,250 sq ft the shop and hangar space Lockheed Aircraft Corp. will have available for aircraft repair, maintenance and modification contracts. Now two months along, the new hangars will cost \$224,800.

## Turkish Project Set

**ANKARA**, Turkey (UPI)—General Mills World Maintenance and Installation has a contract of \$1 million to inspect and repair 100 aircraft in Ankara, Istanbul, Beyrouth and Adana. The work will be supplied by the U.S. Westinghouse Co. under an agreement with the Turkish Central Directorate of Aircraft Control.

A \$4,500,000 credit has been approved

American engines are expected

in Turkey shortly to assist

with the work, which will require five years.

Corp. described as the first such inspection without cost to a third government. Included in the 100 aircraft to be inspected are 100 twin-engine and older, 100 twin and trijet-engine, 100 piston and 100 jet aircraft. The project is to inspect and repair 100 aircraft of all types of the proposed maintenance program.

**Michigan Cities**—The last meeting of the Michigan Cities Council of the Michigan Municipal League was held when the City Council voted to take over the control of the city's small buildings from the AFM Agency. The agency had been given the authority to administer the city's small buildings, but the cities wanted to continue to own them.

Michigan cities are now working

to develop a system for the small airports which serve their communities. They will ignore the Commerce Control Commission's ruling that the airports be closed if the cities do not buy them. No city, however, they prefer to wait until the commission's decision on the University of Michigan's application for expansion of Willow Run Airport is a research center, which would give the commission time to rule on the matter. The cities indicate that if the application is denied, they will then buy the airports themselves. Willow Run will then turn the Government and operate it jointly with the cities.

The cities say that the airports

now have 100,000 hours annually

and 100,000 passengers annually

and 100,000 landings annually

and 100,000 takeoffs annually

and 100,000 aircraft annually





## EDITORIAL \*

### Government And Industry Agree On Research Policy

It would be difficult to over-emphasize the importance of the national aeronautical research policy announced today by the National Advisory Committee for Aeronautics with the approval of the Army and Navy air services, CAA and the aircraft industry. For the first time this puts all the organizations concerned in aeronautical research on a sound and mutually agreeable basis of cooperation through a definition of spheres of activity.

Adoption of the policy ends certain misundertandings among aviation groups and facilitates establishment of Councils on Air Research, an organization of government, aircraft industry and public.

But most important, it provides what appears to be the best instrumentality for keeping that country's military, civil and commercial aviation ahead of that of any other country. All concerned deserve praise for their recognition of what has been a weakness in our aeronautical framework and their common-sense approach to a solution.

The preamble to the NACA statement points out that accelerated enemy research and development created an opportunity for aggression which was promptly exploited. "The lesson is the most expensive we ever had to learn. We must make certain that we do not forget it."

As a result of airtwane research in this country by NACA, the Army, the Navy and the services, it is asserted, American aeronautical engineering operations now stand No. 1. Now, however, that lead is endangered. "We already have informed of extremely ambitious plans to surpass present American research equipment, already as a desire as ever," the air force said.

As a protection, NACA believes it so is in the public interest to have a greatly increased civil use of the airplane. "A vigorous civil aviation can affect favorably our domestic and international interests both economic and cultural. At the same time it will contribute to national security by the support of a reserve of airplane, operating, development and manufacturing facilities and personnel trained in the skills which are critical in time of war."

The key to the achievement of that goal is research to solve the many problems preceding the path of development of the airplane. Therefore, the policy recommends that the Army Air Forces, the Bureau of Aeronautics of the Navy Department, the Civil Aeronautics Board and the Civil Aeronautics Administration of the Department of Commerce, and the NACA, concur, in so far as may be practicable, in the following general policy considerations on the post-war utilization of research, experimental and testing facilities of the government and their relation to the development facilities of the aircraft industry.

(A) Fundamental research in the aeronautical sciences is the principal objective of the NACA. Such research is directed toward the solutions of the prob-

lems of flight and results are promptly published.

(B) Research of the NACA is not considered completed until results are tested by sufficient practical application. However, NACA research will not exclude the development of specific aircraft or equipment.

(C) Research programs of the NACA are formulated in close collaboration with technical personnel from the government agencies concerned and from industry through membership on appropriate subcommittees.

(D) The research facilities of the NACA may be used on request by a government agency in evaluation of specific aircraft and equipment, whenever facilities available to that agency are inadequate.

(E) The research facilities of the NACA laboratory may be used to assist private individuals and corporations, provided that the investigation is considered by the NACA to be worthy of aiding.

(F) Application of research results in the design and development of improved aircraft and equipment, both civil and military, is the function of the industry, assisted as may be necessary by contracts for experimental studies placed in a manner to stimulate competition for quality. It is recognized that the encouragement of competitive engineering organizations is essential.

(G) The evaluation of military aircraft and equipment developed by the industry and the exploration of possible military applications of research results are considered to be the function of the Army and Navy.

(H) Exploration of the practical use in civil aeronautics of newly-developed aircraft and equipment, in so far as government assistance may be necessary, is referred to be the function of the Civil Aeronautics Administration.

(I) The NACA normally will use its own research facilities, but will collaborate with government and other private research organizations for work in special fields. Interests of other government research centers will be used by the NACA whenever practicable.

(J) Unnecessary duplication of facilities and effort will be avoided by adherence to the principles stated above, but far important problems where practical solution appears to be especially difficult, parallel activities by several independent research teams are necessary — such parallel efforts must be coordinated, and it is the policy of the NACA to achieve such coordination through the medium of subcommittees of experts representing all concerned.

The aircraft industry's endorsement of the NACA policy was made by J. H. Kindelberger, president of North American Aviation, Inc., who is chairman of NACA's industry consulting committee.

Ronald H. Wood



## STIRRING Diary OF AN AIRLINE

First and only airline to span 20 years of continuous operation, Western Air Lines, on April 17, celebrates two decades of service to the American traveler and shipper. Western Air's pioneering is the story of air transportation. Here are a few highlights.

1936: The first passenger service on scheduled air mail flights was inaugurated between Salt Lake City and Los Angeles on May 23.

1941: Western Air selected the nation's first multi-engined cabin planes in Los Angeles-Biltmore Fleet.

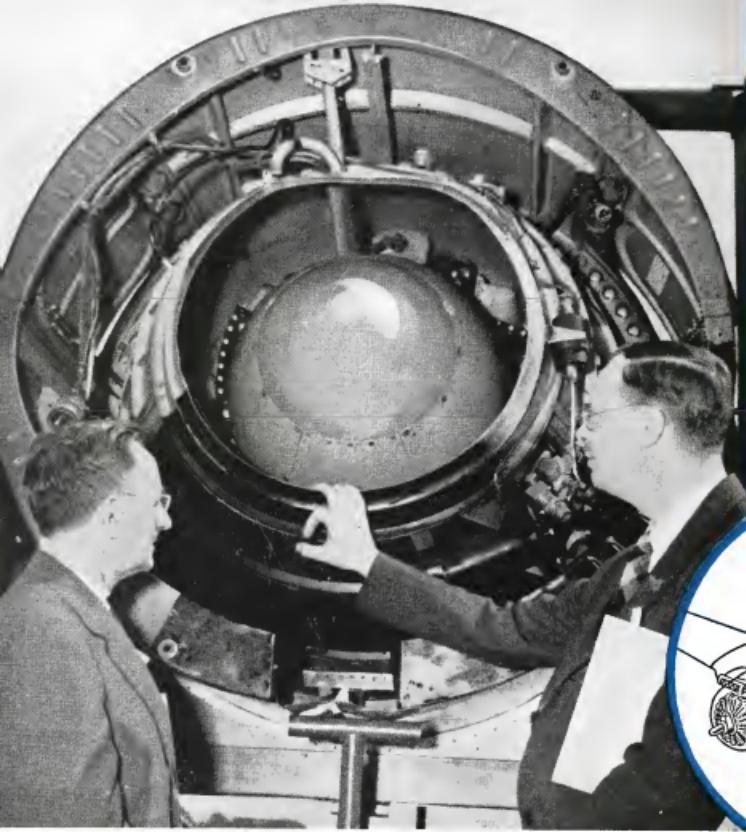
1942: The "fireman analysis" system of weather forecasting was pioneered for engine operation. Added to safety and comfort of passengers.

1944: Western Air purchased National Parks Airways, began building routes which today serve more isolated playgrounds than any other airline.

1944-46: In daily flights to Alaska for Air Transport Command, Western Air transports that helped bring the Japan all these planes undertaken costs of \$10,000 per day with a perfect safety record.

1946: With 6000 route miles (10 longest in U.S.) that reach 30 states in the West and cities and Canada, Western Air in route 120,000,000 in ton-miles, larger planes, system wide improvement of service.

WESTERN AIR LINES  
AMERICA'S PIONEER AIRLINE  
GENERAL TRAFFIC OFFICES 530 WEST SIXTH STREET, LOS ANGELES 14



# POWER Plus - - - ON THE FIREBALL



PRECISION PRODUCTS  
AND  
ENGINEERED SYSTEMS  
FOR AIRCRAFT

—and double trouble for an opponent! The Navy Fireball has two engines—one a conventional reciprocating engine, the other a G-E gas turbine. Here, R. G. Standerwick and D. F. Warner, G-E engineers in charge of the development of this turbine, the I-16, are inspecting a mockup of it. As can be seen in the diagram, the turbine is located behind the pilot, and receives air through ducts in the leading edges of the wings. It uses the same fuel as the reciprocating engine. This combination of engines means greater maneuverability, greater climbing speeds, and a greater margin of safety in combat—it's a real balance of power.

Gas-turbine research and development, for which General Electric is especially well fitted, are being continued now, looking to applications on commercial aircraft. The Fireball installation marks a step forward in the trend toward planes with a combination jet and propeller drive. At G-E flight-test headquarters work is being done on several types of aircraft gas turbines, and any information we can give you about this equipment is available to you at any time.

*Apparatus Department, General Electric Company, Schenectady 5, N. Y.*

**GENERAL** **ELECTRIC**

674-88-3872